JMPS version 2.0

Naval User Requirements Capture Process

Scope of Effort…

C3

- Early Warning
- Air Control
- Surface Control
- Communications Management
- Take Charge and Move Out (TACAMO)

COUNTER AIR

- Offensive Counter Air
- Defensive Counter Air

INTERDICTION

- Close Air Support (CAS)
- Forward Air Control (FAC)
- Strike Coordination and Reconnaissance (SCAR)
- Surface Warfare
- Maritime Air Support
- Suppression of Enemy Air Defenses (SEAD)
- Deep Air Strike (DAS)

SAR/CSAR

- Search and Rescue
- Combat Search and Rescue

AERIAL REFUELING

EXPEDITIONARY OPS

- Assault Support
- Offensive Air Support
- Control of Aircraft and Missiles
- Electronic Warfare
- Reconnaissance and UAVs
- Anti-Air Warfare

ELECTRONIC WARFARE

- Information Warfare
- Electronic Warfare
- Electronic Attack
- Electronic Protection
- Electronic Surveillance

AIR/SEA/LAND DELIVERY

- Airdrop
- Air-Landed Passengers
- Air Movement
- Air Supply (VERTREP/VOD)
- Medical Evacuation (MEDEVAC)

RECONNAISSANCE

- Tactical Air (TACAIR)
- Tactical Air Reconnaissance Pod (TARPS)
- Advanced Tactical Airborne Reconnaissance System (ATARS)
- Shared Reconnaissance Pod (SHARP)

TRAINING

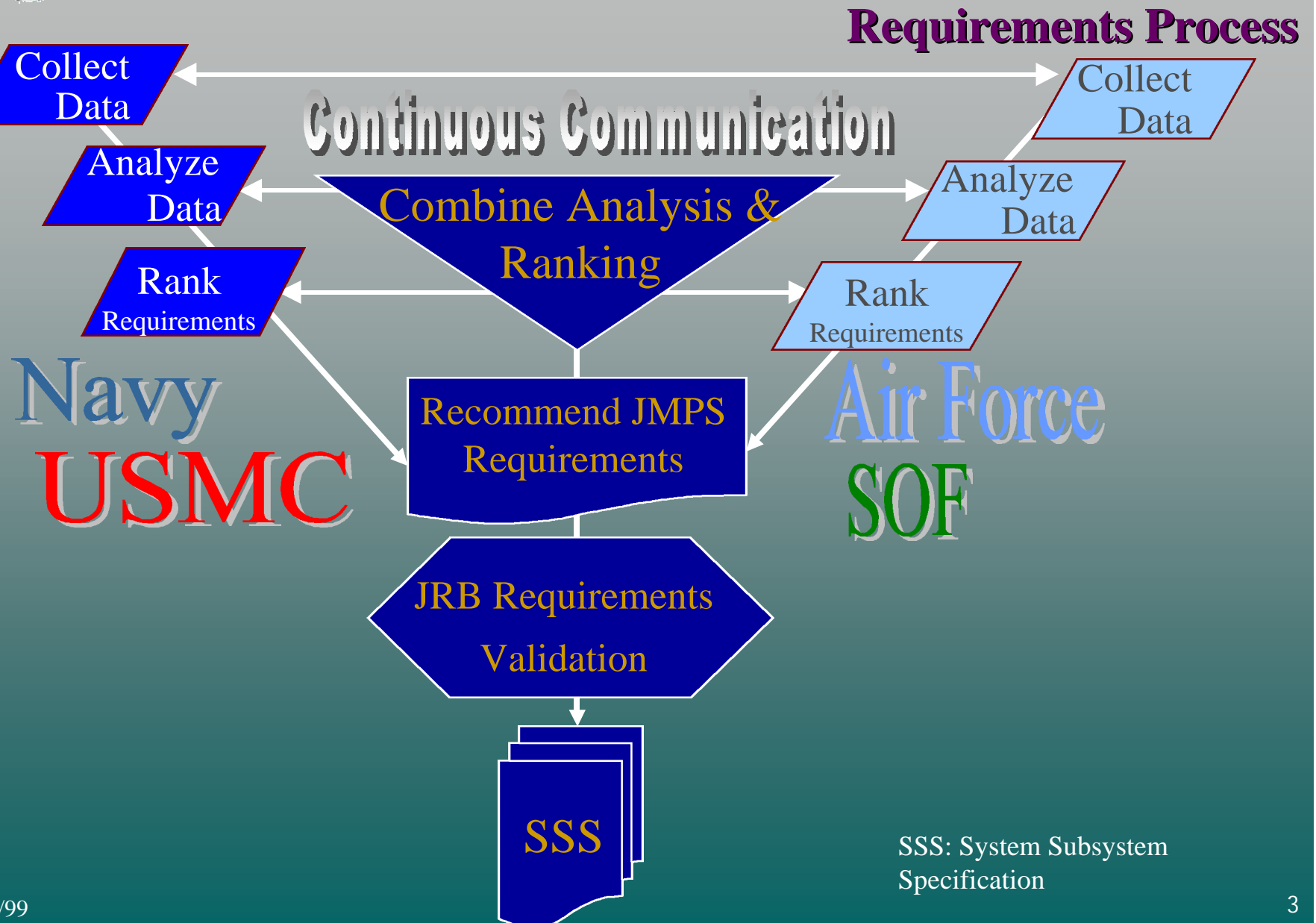- Training (TRACOM level Helo/ Prop/ Jet)

MARITIME

- Under Sea Warfare (USW)
- Surface Warfare (SUW)
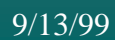- Mine Warfare (MIW)
- Mine Counter Measures (MCM)

SPECIAL OPERATIONS

- Maritime Special Operations
- Direct Action
- Special Reconnaissance
- Foreign Internal Defense
- Unconventional Warfare
- Combating Terrorism
- Coalition Support
- Combat Search and Rescue
- Counter Drug Activities
- Humanitarian Assistance
- Security Assistance

Requirements Process

Collect Data

Collect Data

Continuous Communication

Analyze Data

Combine Analysis & Ranking

Analyze Data

Rank Requirements

Rank Requirements

Navy

USMC

Recommend JMPS Requirements

Air Force

SOF

JRB Requirements Validation

SSS

SSS: System Subsystem Specification

WAURG

The User Shall Be Able To ...
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Source Doc

Source Doc

Continuous Communication

Collect Data
Analyze Data
Rank Requirements

Combine Analysis & Ranking
Recommend JMPS Requirements
JRB Requirements Validation
XSS

Navy
USMC
Air Force
SOF

Research and Analysis
Raw Req's
Decomposition
FDD
User Requirement Statement Generation
DRAFT REQ'S
Fleet Verification
FDD
CONOPS gaps
Recommended Changes
Task Implementation Need Dates
CONOPS Change Req's
Requirement Validation
Validated User Req's

JMPS v2 Naval User Requirements Capture Process

- **Five major steps to completion:**

  – Research and Analysis

  – Decomposition of Combat Mission Planning Tasks

  – User Requirement Statements Generation

  – Fleet Verification

  – Requirements Validation

Research and Analysis → Task Decomposition → User Requirement Statement Generation → Fleet Verification → Requirement Validation

- Documentation is collected for Warfare Area*

  - CONOPS, Fleet messages, after action reports, design analyses, etc...

  - Initial WAG meetings held

- Docs are imported into DOORS*

- Docs are analyzed for mission planning related requirements

- Pertinent entries are marked as requirements

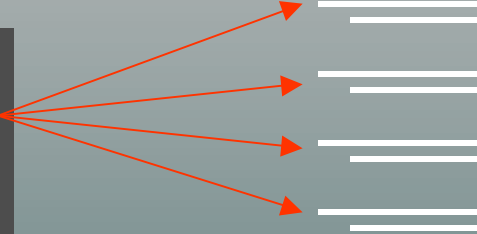- Links from requirement to source doc are automatically established

Source Documentation

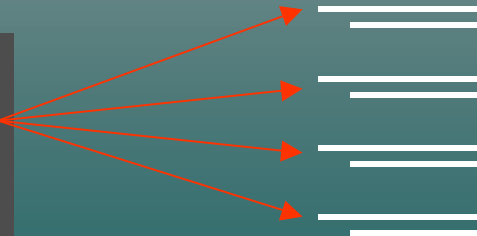**Extracted User Need Statements**

CONOPS

FLEET MSG

Links to Source Docs
maintained in DOORS

Research and Analysis → Raw Req's → Task Decomposition   User Requirement Statement Generation   Fleet Verification   Requirement Validation
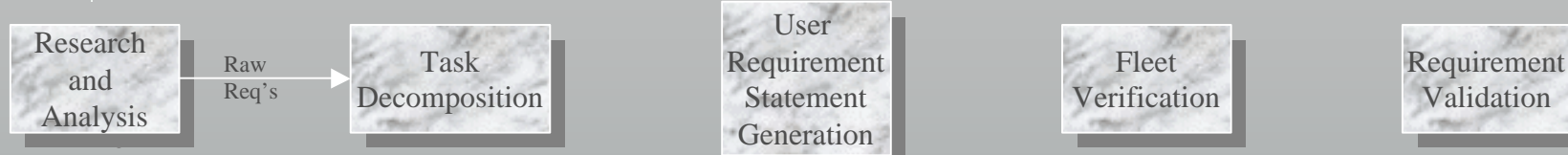
- Marked requirements are "mapped" into a generic task decomposition diagram (TDD)

  – generic TDD is based on the CONOPS v2 Main Body…

- Gaps in current CONOPS are graphically identified

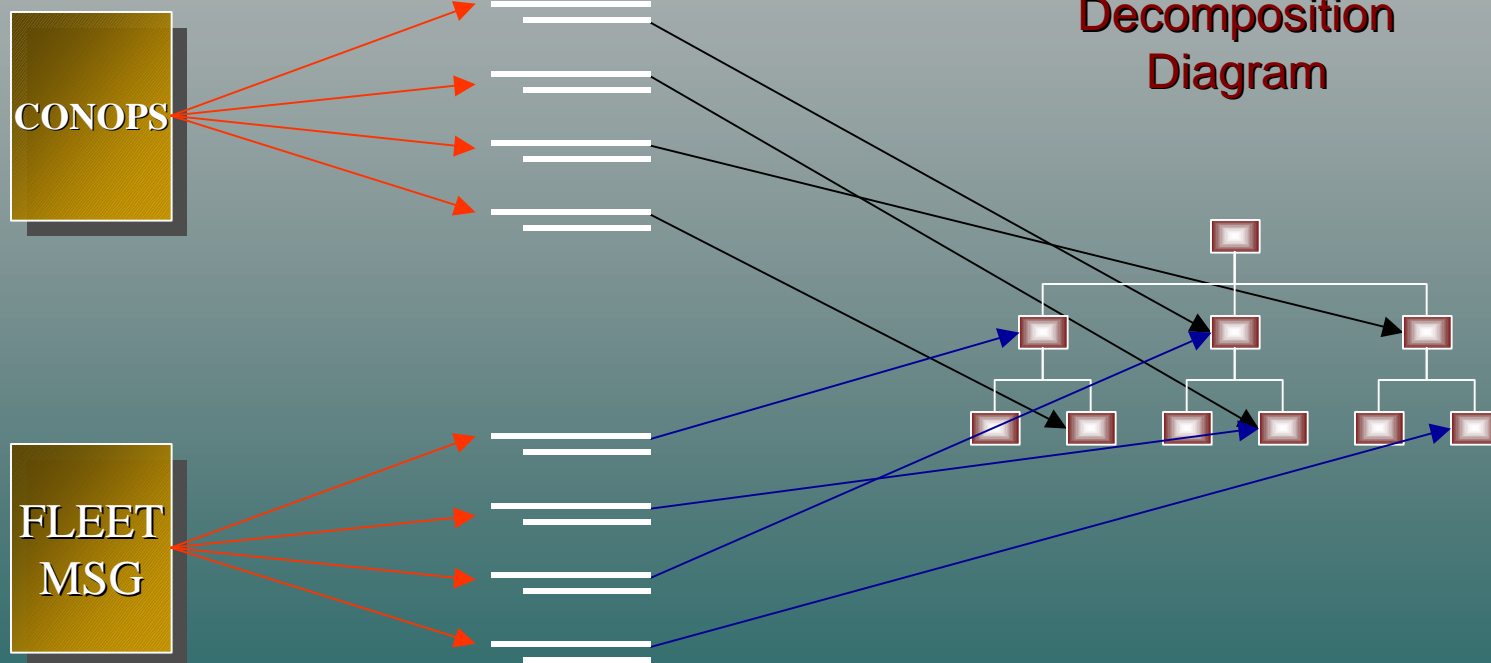- Descriptive notes are entered for each task block of the TDD

Source Documentation

Extracted User Need Statements

Task Decomposition Diagram

CONOPS

FLEET MSG

Need Statements are grouped by common task...

Links to Source Docs maintained in DOORS

Research and Analysis	Raw Req's →	Task Decomposition	TDD →	User Requirement Statement Generation		Fleet Verification		Requirement Validation

- Task statements from the TDD are imported into the DOORS database as informal User Requirements
  - hundreds of entries from diverse sources are now organized by common task

- Entries are then formatted as formal User Requirement Statements

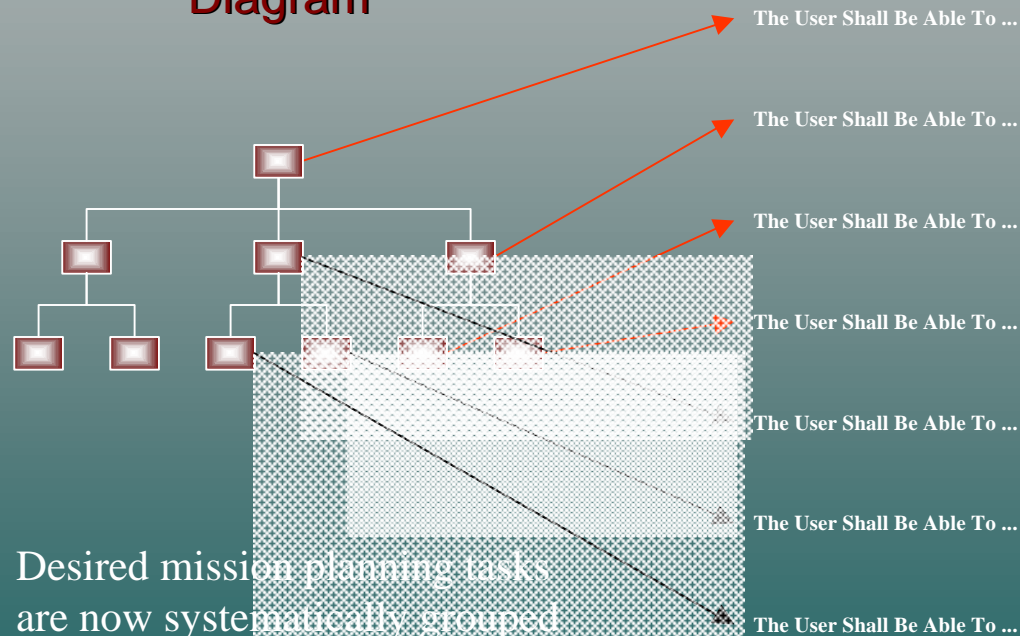- Links back to original source docs are maintained

Task Decomposition Diagram

Generated Formal User Requirement Statements

The User Shall Be Able To ...

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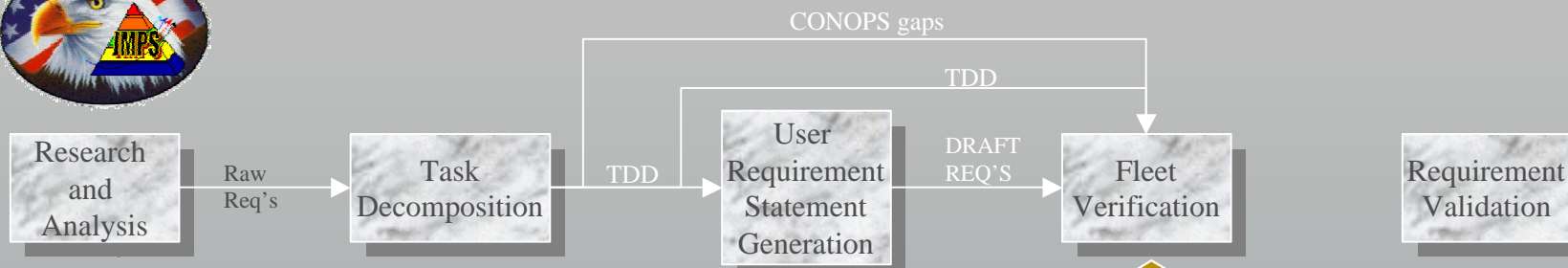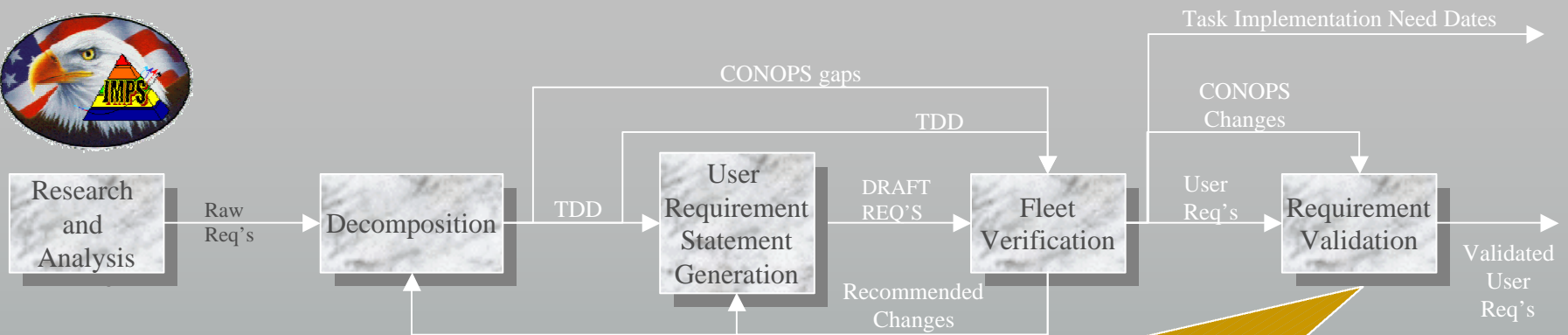
WAURG

Desired mission planning tasks are now systematically grouped by common tasks...

Links back to source docs are maintained throughout the process

CONOPS gaps

TDD

| Research and Analysis | → Raw Req's → | Task Decomposition | → TDD → | User Requirement Statement Generation | DRAFT REQ'S → | Fleet Verification | | Requirement Validation |

- **Conduct the Warfare Area User Requirements Group (WAURG) conference**
  - Composed of members from Fleet, PMAs, Centers of Excellence, School Commands, Testing, System Engineering, Risk and Q/A

- **WAURG will:**
  - review the TDD & the draft User Requirement Statements (with source links) and make change recommendations
  - author CONOPS updates as needed
  - recommend a categorized set of User Requirement Statements

- **Changes will be incorporated to the TDD, CONOPS and URdb**

Task Implementation Need Dates

CONOPS gaps

CONOPS Changes

TDD

| Research and Analysis | Raw Req's | Decomposition | TDD | User Requirement Statement Generation | DRAFT REQ'S | Fleet Verification | User Req's | Requirement Validation | Validated User Req's |

Recommended Changes

Sponsors will:

- Review the set of WAURG verified User Requirement Statements and the WAURG's recommended categorization

- Perform a ranking of requirements based on guidance and budget

- Present User Requirement Statements to the JRB as a series of "Statements of Operational Intent" (SOIs)

- Review recommended changes to the CONOPS

What's Been Done So Far?

- Built a "first cut" TDD

- Gathered 21 source docs of varying utility

- Analyzed and mapped what we think are valid Maritime user needs to the TDD

- Built a requirements database

- Established links between the source docs and the task statements

- Reached a point where we need to get the experts to verify our work and add validity to the model and the products

Our Expectations of You

- Break into working groups by community

  – Elect a spokesman for your community

- Check our work and identifying missing requirements and source documents

- Provide "Stamp of Approval" (validate) to the products for presentation to PMA-233

- Identify common mission planning tasks as a Maritime Warfare group

- Agree to a set of rules and categorize your user requirements

- Give us an assessment of this prototype effort